

BROOKHAVEN NATIONAL LABORATORY
ASSOCIATED UNIVERSITIES, INC.

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Medical Department

April 28, 1988

Henry Kohn, M.D.
Rongelap Reassessment Project
1203 Shattuck Ave.
Berkeley, California 94709

Dear Dr. Kohn,

Let me state briefly what the Brookhaven National Laboratory Marshall Islands Medical Program is and what it is not.

The medical program is mandated by Congress under Public Law 95-134 to provide for diagnosis and treatment of radiation-related disease among the populations of Rongelap and Utirik exposed to Bravo fallout radiation in 1954. The U.S. Department of Energy fulfills this mandate by contracting with the medical department, Brookhaven National Laboratory, to provide said care. The Department of Energy has permitted, by providing the necessary operating funds, an extension of the program to cover many aspects of health care unrelated to radiation exposure and to offer medical services to a great number of unexposed persons. No funds are made available for research because Congress did not intend the medical program to carry out research; clinical care of the injured parties is the program's sole purpose. Therefore, all activities of the medical program have a clinical goal, that being improvement of the health of the population identified in PL 95-134. The ability to disseminate the capabilities of the medical program among the general Marshallese population represents the natural tendency of any health care organization. It is to the great credit of U.S. Department of Energy personnel responsible for carrying out the Congressional mandate that this expansion of coverage has been warmly supported.

Sincerely yours,

W. H. Adams

William H. Adams, M.D.
Director, Marshall Islands
Medical Program

Appendix # 2.

Excerpt, Minutes, AEC's Division of Biology and Medicine, November 17, 1956

In 1988, Rongelap obtained documents from the archives of the Atomic Energy Commission's Advisory Committee on Biology and Medicine pertaining to the decision to return the Rongelap people. The word "safe," as Rongelap has come to learn, has a meaning at DOE that, it would appear, only applies to the Rongelap people. The November 17, 1956, discussion on "Return of Rongelapese" is reported in the Committee's minutes as follows:

DR. DUNNING was then asked to present his report on radioactive contamination of Pacific areas...After Dr. Dunning's report...Dr. Durham asked for comments from the Committee concerning the return of the natives to Rongelap. The current low morale of the natives was pointed out and the advantages of returning them to their homes presented as a factor which should be balanced against the possible radiation hazard in their return. It has been suggested by Dr. Conard that they be permitted to return in April or May, 1958. Further discussion followed as to means of continuing the monitoring of these natives and also those from the Island of Uterick for comparative purposes. DR. Glass expressed the opinion that be believed that the benefit of returning them is inclined to outweigh the danger and that it would be unrealistic to base conclusions on the dose levels intended for a large population to this relative small group, even though it is an entire population. DR. FAILLA pointed out that the ICRP limit of 5.0 per year is not intended to be the limit for a large population. It was agreed that because of the relatively high exposure to which these natives had already been subjected, limiting their exposure in terms from now on was unrealistic; but on the other hand, the psychological effect of permitting them to receive more radiation than our own people, could be subject to criticism. A further discussion resulted in the decision to prepare a statement expressing the Committee's opinion.

The Advisory Committee, the minutes further indicated, then approved a statement on resettlement of the Rongelapese. The following statement was prepared and included in the minutes:

It is moved that the ACBM approve the Division of Biology and Medicine's proposal to return the Rongelapese to their native atoll. However, it is the opinion of the ACBM that if it

*should become necessary to re-evaluate because of further tests,
there would result world opinion unfavorable to the
continuation of weapons testing.*

5/18/60

FEDERAL RADIATION COUNCIL

RADIATION PROTECTION GUIDANCE FOR FEDERAL AGENCIES

Memorandum for the President

Pursuant to Executive Order 10831 and Public Law 86-373, the Federal Radiation Council has made a study of the hazards and use of radiation. We herewith transmit our first report to you concerning our findings and our recommendations for the guidance of Federal agencies in the conduct of their radiation protection activities.

It is the statutory responsibility of the Council to " . . . advise the President with respect to radiation matters, directly or indirectly affecting health, including guidance for all Federal agencies in the formulation of radiation standards and in the establishment and execution of programs of cooperation with States"

Fundamentally, setting basic radiation protection standards involves passing judgment on the extent of the possible health hazard society is willing to accept in order to realize the known benefits of radiation. It involves inevitably a balancing between total health protection, which might require foregoing any activities increasing exposure to radiation, and the vigorous promotion of the use of radiation and atomic energy in order to achieve optimum benefits.

The Federal Radiation Council has reviewed available knowledge on radiation effects and consulted with scientists within and outside the Government. Each member has also examined the guidance recommended in this memorandum in light of his statutory responsibilities. Although the guidance does not cover all phases of radiation protection, such as internal emitters, we find that the guidance which we recommend that you provide for the use of Federal agencies gives appropriate consideration to the requirements of health protection and the beneficial uses of radiation and atomic energy. Our further findings and recommendations follow.

Discussion. The fundamental problem in establishing radiation protection guides is to allow as much of the beneficial uses of ionizing radiation as possible while assuring that man is not exposed to undue hazard. To get a true insight into the scope of the problem and the impact of the decisions involved, a review of the benefits and the hazards is necessary.

It is important in considering both the benefits and hazards of radiation to appreciate that man has existed throughout his history in a bath of natural radiation. This background radiation, which varies over the earth, provides a partial basis for understanding the effects of radiation on man and serves as an indicator of the ranges of radiation exposures within which the human population has developed and increased.

The benefits of ionizing radiation. Radiation properly controlled is a boon to mankind. It has been of inestimable value in the diagnosis and treatment of diseases. It can provide sources of

energy greater than any the world has yet had available. In industry, it is used as a tool to measure thickness, quantity or quality, to discover hidden flaws, to trace liquid flow, and for other purposes. So many research uses for ionizing radiation have been found that scientists in many diverse fields now rank radiation with the microscope in value as a working tool.

The hazards of ionizing radiation. Ionizing radiation involves health hazards just as do many other useful tools. Scientific findings concerning the biological effects of radiation of most immediate interest to the establishment of radiation protection standards are the following:

1. Acute doses of radiation may produce immediate or delayed effects, or both.

2. As acute whole body doses increase above approximately 25 rems (units of radiation dose), immediately observable effects increase in severity with dose, beginning from barely detectable changes, to biological signs clearly indicating damage, to death at levels of a few hundred rems.

3. Delayed effects produced either by acute irradiation or by chronic irradiation are similar in kind, but the ability of the body to repair radiation damage is usually more effective in the case of chronic than acute irradiation.

4. The delayed effects from radiation are in general indistinguishable from familiar pathological conditions usually present in the population.

5. Delayed effects include genetic effects (effects transmitted to succeeding generations), increased incidence of tumors, lifespan shortening, and growth and development changes.

6. The child, the infant, and the unborn infant appear to be more sensitive to radiation than the adult.

7. The various organs of the body differ in their sensitivity to radiation.

8. Although ionizing radiation can induce genetic and somatic effects (effects on the individual during his lifetime other than genetic effects), the evidence at the present time is insufficient to justify precise conclusions on the nature of the dose-effect relationship at low doses and dose rates. Moreover, the evidence is insufficient to prove either the hypothesis of a "damage threshold" (a point below which no damage occurs) or the hypothesis of "no threshold" in man at low doses.

9. If one assumes a direct linear relation between biological effect and the amount of dose, it then becomes possible to relate very low dose to an assumed biological effect even though it is not detectable. It is generally agreed that the effect that may actually occur will not exceed the amount predicted by this assumption.

Basic biological assumptions. There are insufficient data to provide a firm basis for evaluating radiation effects for all types and levels of irradiation. There is particular uncertainty with respect to the biological effects at very low doses and low-dose rates. It is not prudent therefore to assume that there is a level of radiation exposure below which there is absolute certainty that no effect may occur. This consideration, in addition to the adoption of the conservative hypothesis of a linear relation between biological effect and the amount of dose, determines our basic approach to the formulation of radiation protection guides.

The lack of adequate scientific information makes it urgent that additional research be undertaken and new data developed to provide a firmer basis for evaluating biological risk. Appropriate member agencies of the Federal Radiation Council are sponsoring and encouraging research in these areas.

Recommendations. In view of the findings summarized above the following recommendations are made:

It is recommended that:

1. There should not be any man-made radiation exposure without the expectation of benefit resulting from such exposure. Activities resulting in man-made radiation exposure should be authorized for useful applications provided in recommendations set forth herein are followed.

It is recommended that:

2. The term "Radiation Protection Guide" be adopted for Federal use. This term is defined as the radiation dose which should not be exceeded without careful consideration of the reasons for doing so; every effort should be made to encourage the maintenance of radiation doses as far below this guide as practicable.

It is recommended that:

3. The following Radiation Protection Guides be adopted for normal peacetime operations:

Type of exposure	Condition	Dose (rem)
Radiation worker:		
(a) Whole body, head and trunk, active blood forming organs, gonads, or lens of eye.	Accumulated dose	5 times the number of years beyond age 18.
	13 weeks	3.
(b) Skin of whole body and thyroid	Year	30.
	13 weeks	10.
(c) Hands and forearms, feet and ankles	Year	75.
	13 weeks	25.
(d) Bone	Body burden	0.1 microgram of radium-226 or its biological equivalent.
(e) Other organs	Year	15.
	13 weeks	5.
Population:		
(a) Individual	Year	0.5 (whole body).
(b) Population	30 year	5 (gonads).

The following points are made in relation to the Radiation Protection Guides herein provided:

(1) For the individual in the population, the basic Guide for annual whole body dose is 0.5 rem. This Guide ap-

plias when the individual whole body doses are known. As an operational technique, where the individual whole body doses are not known, a suitable sample of the exposed population should be developed whose protection guide for annual whole body dose will be 0.17 rem per capita per year. It is emphasized that this is an operational technique which should be modified to meet special situations.

(2) Considerations of population genetics impose a per capita dose limitation for the gonads of 5 rems in 30 years. The operational mechanism described above for the annual individual whole body dose of 0.5 rem is likely in the immediate future to assure that the gonadal exposure Guide (5 rem in 30 years) is not exceeded.

(3) These Guides do not differ substantially from certain other recommendations such as those made by the National Committee on Radiation Protection and Measurements, the National Academy of Sciences, and the International Commission on Radiological Protection.

(4) The term "maximum permissible dose" is used by the National Committee on Radiation Protection (NCRP) and the International Commission on Radiological Protection (ICRP). However, this term is often misunderstood. The words "maximum" and "permissible" both have unfortunate connotations not intended by either the NCRP or the ICRP.

(5) There can be no single permissible or acceptable level of exposure without regard to the reason for permitting the exposure. It should be general practice to reduce exposure to radiation, and positive effort should be carried out to fulfill the sense of these recommendations. It is basic that exposure to radiation should result from a real determination of its necessity.

(6) There can be different Radiation Protection Guides with different numerical values, depending upon the circumstances. The Guides herein recommended are appropriate for normal peacetime operations.

(7) These Guides are not intended to apply to radiation exposure resulting from natural background or the purposeful exposure of patients by practitioners of the healing arts.

(8) It is recognized that our present scientific knowledge does not provide a firm foundation within a factor of two or three for selection of any particular numerical value in preference to another value. It should be recognized that the Radiation Protection Guides recommended in this paper are well below the level where biological damage has been observed in humans.

It is recommended that:

4. Current protection guides used by the agencies be continued on an interim basis for organ doses to the population.

Recommendations are not made concerning the Radiation Protection Guides for individual organ doses to the population, other than the gonads. Unfortunately, the complexities of establishing guides applicable to radiation exposure of all body organs preclude the Council from making recommendations concern-

ing them at this time. However, current protection guides used by the agencies appear appropriate on an interim basis. It is recommended that:

5. The term "Radioactivity Concentration Guide" be adopted for Federal use. This term is defined as the concentration of radioactivity in the environment which is determined to result in whole body or organ doses equal to the Radiation Protection Guide.

Within this definition, Radioactivity Concentration Guides can be determined after the Radiation Protection Guides are decided upon. Any given Radioactivity Concentration Guide is applicable only for the circumstances under which the use of its corresponding Radiation Protection Guide is appropriate.

It is recommended that:

6. The Federal agencies, as an interim measure, use radioactivity concentration guides which are consistent with the recommended Radiation Protection Guides. Where no Radiation Protection Guides are provided, Federal agencies continue present practices.

No specific numerical recommendations for Radioactivity Concentration Guides are provided at this time. However, concentration guides now used by the agencies appear appropriate on an interim basis. Where appropriate radioactivity concentration guides are not available, and where Radiation Protection Guides for specific organs are provided herein, the latter Guides can be used by the Federal agencies as a starting point for the derivation of radioactivity concentration guides applicable to their particular problems. The Federal Radiation Council has also initiated action directed towards the development of additional Guides for radiation protection.

It is recommended that:

7. The Federal agencies apply these Radiation Protection Guides with judgment and discretion, to assure that reasonable probability is achieved in the attainment of the desired goal of protecting man from the undesirable effects of radiation. The Guides may be exceeded only after the Federal agency having jurisdiction over the matter has carefully considered the reason for doing so in light of the recommendations in this paper.

The Radiation Protection Guides provide a general framework for the radiation protection requirements. It is expected that each Federal agency, by virtue of its immediate knowledge of its operating problems, will use these Guides as a basis upon which to develop detailed standards tailored to meet its particular requirements. The Council will follow the activities of the Federal agencies in this area and will promote the necessary coordination to achieve an effective Federal program.

If the foregoing recommendations are approved by you for the guidance of Federal agencies in the conduct of their radiation protection activities, it is further recommended that this memorandum be published in the FEDERAL REGISTER.

ARTHUR S. FLEMING,
Chairman,
Federal Radiation Council.

The recommendations numbered "1" through "7" contained in the above memorandum are approved for the guidance of Federal agencies, and the memorandum shall be published in the FEDERAL REGISTER.

DWIGHT D. EISENHOWER

MAY 13, 1960.

[F.R. Doc. 60-4539; Filed, May 17, 1960; 8:51 a.m.]

FEDERAL RESERVE SYSTEM

NEW HAMPSHIRE BANKSHARES, INC.

Notice of Tentative Decision on Application for Prior Approval of Acquisition by Bank Holding Company of Voting Shares of Bank

Notice is hereby given that, pursuant to section 3(a) of the Bank Holding Company Act of 1956, New Hampshire Bankshares, Inc., Nashua, New Hampshire, a bank holding company, has applied for the Board's prior approval of the acquisition of up to 60 percent of the 2,000 outstanding voting shares of The Peoples National Bank of Claremont, Claremont, New Hampshire. Information relied upon by the Board in making its tentative decision is summarized in the Board's Tentative Statement¹ of this date, which is attached hereto and made a part hereof, and which is available for inspection at the Office of the Board's Secretary, at all Federal Reserve Banks, and at the Office of the Federal Register.

The record in this proceeding to date consists of the application, the Board's letter to the office of the Comptroller of the Currency inviting his views and recommendations on the application, the Comptroller's reply, this Notice of Tentative Decision, and the Tentative Statement.

For the reasons set forth in the Tentative Statement, the Board proposes to grant the application.

Notice is further given that any interested person may, not later than fifteen (15) days after the publication of this notice in the FEDERAL REGISTER, file with the Board in writing any comments upon or objections to the Board's proposed action. Communications should be addressed to the Secretary, Board of Governors of the Federal Reserve System, Washington 25, D.C.

Following expiration of the said 15-day period, the Board's Tentative Decision will be made final by order to that effect, unless for good cause shown other action is deemed appropriate by the Board.

Dated at Washington, D.C., this 11th day of May 1960.

By order of the Board of Governors.

[SEAL] MERRITT SHERMAN,
Secretary.

[F.R. Doc. 60-4480; Filed, May 17, 1960; 8:49 a.m.]

¹ Filed as part of the original document.

Secretarial Panel for the Evaluation of Epidemiologic Research Activities for the Department of Energy

Interim Report to the Secretary of Energy

Introduction

This Interim Report is based on what the Panel has learned to date about the epidemiology program and is in response to the Secretary's request to receive preliminary comments which might be of help in establishing the Department of Energy's fiscal year 1991 budget. The staffing and budget resources that the Panel recommends are those that we believe, based on our study to date, are required for a sound epidemiologic research program wherever that program might reside organizationally. The Panel has not reached a conclusion about whether the epidemiology program should remain where it is within the Department, be relocated within the Department, or be moved to another agency.

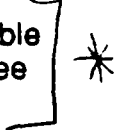
The Secretary and the Department's staff have exhibited an impressive seriousness of purpose and a willingness to explore past practices and potential changes in the program. The Panel expresses its thanks to both the Department's staff and its contractors for their willingness to assist the Panel in its work. We believe their cooperation reflects their commitment to the Secretary's goals in undertaking this study. The Panel also has become aware of the need for the Department to be more open to the public, including the scientific community, regarding access to information.

Items for the Secretary's Immediate Attention

The Panel has held six days of hearings, conducted one site visit, heard testimony from 42 persons from within and outside the Department, and studied hundreds of pages of written material.

The Panel finds ample evidence to confirm weaknesses in the Department's epidemiology program. The Panel has identified several issues that call for the immediate attention of the Secretary:

- The Secretary should take whatever steps are necessary to establish the Department's authority to release health data of value to epidemiologic research, such as employee medical records, exposure data, biological monitoring records, and personnel records. Where the Department's sole ownership is in question, legal or legislative steps must be taken to establish at least shared ownership among the Department, its contractors, and workers. Steps can be taken now for data that will be collected in the future.

- The Secretary should begin immediately to secure agreements with the States providing for the release of death certificates so that the certificates or information derived from them may be appropriately included in data sets available to research investigators. The Association of State and Territorial Health Officials would be a valuable resource for the Department as it negotiates with more than 50 jurisdictions. If necessary, legislation should be developed to resolve any legal barrier.
- The Secretary should adopt a policy of maximum possible openness with regard to the release of data to the Three Mile Island Fund research workers. 

Released data should be accompanied by full documentation and any reasonable, appropriate assistance from the Department (or its contractors) which are necessary to render them usable for study. This release should be subject only to the following limitations:

- 1.) Confidentiality protection must be provided for any data which contain personal identifiers.
- 2.) Those final files created by any individual contractor for a specific study, which are under active analysis for the purpose of publication (and which may therefore be subject to proprietary considerations), may be withheld for a reasonable time to complete such studies.

The Panel advises that these limitations be construed narrowly.

- The Secretary should immediately extend the moratorium on the destruction of health data of value to epidemiologic research (such as employee medical records, exposure data, biological monitoring records, and personnel records) by the Department and its contractors.
- The Secretary should consider including in the fiscal year 1991 budget an increase of \$15 million for epidemiologic programs. Details on this item appear later in this report.

Principles Guiding the Panel

The Panel is guided in its judgments by the following principles:

The Panel sees epidemiology as an active process which contributes to improving the health of populations by providing reliable information on the presence and distribution of various illnesses in various population groups. It involves both the gathering of data and the analysis of those data in order to reach conclusions about exposures to harmful materials and activities upon which decisions on protection can be based. Epidemiology, therefore, must be an integral part of worker and community health and safety. To influence policy the findings of any epidemiologic research must be reported promptly and integrated into policy decisions.

The Panel believes that an individual worker's right to confidentiality about medical information must be protected and that the public's right to know about collective health experiences must also be protected. The issue of balancing the privacy of data and the public's need-to-know has already been addressed effectively in other societal contexts, for example, the Occupational Safety and Health Administration regulation for access to employee medical and exposure records. Successful efforts in other settings can be used as models to resolve data access questions in the Department.

Scientific and public credibility are directly dependent upon openness. Whenever this question arises, it is the philosophical approach of the Panel to recommend maximum public access to information. The risk of misuse is more than outweighed by the credibility benefits resulting from the availability of information.

The Panel values the open scientific process in which competing ideas are developed through the traditional scientific practice of peer review. The Panel values the benefits that flow from allowing independent scientists to examine and re-examine data from different perspectives. These processes are critical to the scientific validity of research and critical to the political and social acceptance of the conclusions.

The Panel has heard substantial testimony in its early meetings raising questions about the credibility and validity of epidemiologic research undertaken by the Department and its primary contractors. The Panel believes this to be a legitimate concern and believes that a variety of mechanisms are necessary to assure and protect the independence of the scientific process.

The Panel recognizes a significant difference between the role of custodian of a large health data set (such as the States' custody of vital records) and

the role of sponsor (or financial supporter) of studies based on those data sets or other health information. The Department currently has both roles and, if it is to retain them, must implement both well.

The Panel recognizes the need to protect data which have national security implications. The Department should review protected data periodically to assure that such protection remains necessary for national security.

Elements of an Epidemiology Program

A sound and comprehensive epidemiology program has the following elements:

- Collection of a well-defined minimum set of data which have epidemiologic importance. These would include results of medical screening, exposure monitoring, maintaining injury and illness logs, and the results of routine health surveillance of workers. For the Department this means defining the basic information required for epidemiologic research and standardizing the collection of that information at all facilities.
- Management of data, including archiving information and developing information systems.
- Performance of analytic studies. For the Department these studies could be done by the Departmental staff, Departmental contractors, university groups, independent investigators, and other agencies funded by the Department, and by research workers using Departmental data but not funded by the Department.
- Feedback systems to provide knowledge about health risks and epidemiologic findings to workers, former workers, site and operations managers, policy-makers, and the public.
- Planning both short and long term for the changing research agenda and for implementing epidemiologic findings into policy and program management.
- Overall management of epidemiologic functions, including all activities and funding decisions.

The Panel has not yet ascertained what mix of program elements, or at what levels, would be most desirable for the Department. The Panel believes that some portion of each element must be continued or developed. For whatever components are in the Department, it must employ appropriate experts to provide technical assistance in epidemiology and data management to the Department and to its contractors. The program must

incorporate a full range of quality assurance activities including peer review at all stages.

Resources

The Panel has not reached a conclusion about whether the epidemiology program should remain where it is within the Department, be relocated within the Department, or moved to another agency.

An initial review of the epidemiology program identifies shortcomings in the resources that have been allocated to the program. Key to an understanding of the reduced commitment involves looking at the budgetary history over the past several years.

From fiscal year 1985, resources for the epidemiology program within Energy Research have grown from \$24 to \$30 million. During that time, resources required for the Radiation Effects Research Foundation have increased from \$7.5 million to \$17.5 million. The net result has been a decrease in dollars from \$16.5 million to \$12.5 million for all other studies. This reduction of \$4 million, which took place over a period when inflation would have required another \$4-5 million just to maintain existing levels, has decimated the resource base for epidemiologic research.

The Panel makes the following recommendations for fiscal year 1991 for the epidemiology program recognizing that epidemiologic activities are scattered throughout other Department program areas, for example, in Defense Programs and in the Office of Environment, Safety and Health.

These recommendations address three basic areas: 1) strengthening the management staff; 2) strengthening the current research activities; and 3) broadening research into new and important areas of energy-related epidemiologic research.

Program Management: Whatever the eventual location of the program, the present staff of one epidemiologist should be expanded to include at least a nucleus of academic disciplines capable of giving direction and depth to the management of the overall epidemiologic research program. This minimum management team would give more direction to the Department and to its contractors, would work with peer review groups, and would provide the coordination needed to work effectively with other federal agencies. The expertise needed includes the following disciplines: management, environmental health, occupational health, industrial hygiene, health physics, chronic disease epidemiology, biostatistics, and risk communication.

- The Panel recommends increasing the epidemiology staff by 6 to 8 full-time employees at a cost of approximately \$500,000 in fiscal year 1991.

Strengthen Current Research: Program funding has remained essentially the same in recent years, except for one project--the Radiation Effects Research Foundation study of A-Bomb survivors in Japan--funding for which has increased. The increased funding for the Radiation Effects Research Foundation, combined with rising costs and inflation, have reduced the overall epidemiologic research efforts of the program. With reduced contractor staff and financial support, current projects are proceeding slowly or are not adequately funded for efficient work. Funding for current projects (those in addition to the Radiation Effects Research Foundation) should be restored to a level that reflects the original objectives.

- The Panel recommends increasing funding by \$7 million in the fiscal year 1991 budget, in addition to funds available to the Radiation Effects Research Foundation and the Comprehensive Epidemiologic Data Resource. This recommendation does not imply any specific distribution of funds among current contractors and new participants.

Broaden Epidemiologic Research into New Areas: Epidemiologic research has proceeded within a rather limited range. Many questions about toxic chemicals, non-nuclear energy, and community radiation risks remain unaddressed and fall within the mission of the Department and its epidemiology program.

- The Panel recommends \$7.5 million be included in fiscal year 1991 for new studies. This recommendation does not imply any specific distribution of funds among current contractors and new participants.

Other Issues

The Panel has much work still to do. In addition to a more complete analysis of the issues covered in this Interim Report, the final report will address those issues within the context of a comprehensive epidemiology program. (The outline for the final report is attached.) In its final report, the Panel will address all items in its formal charter. In completing its task, subsequent meetings of the Panel will include attention to the following topics:

- Overall management of epidemiology activities, currently scattered throughout the Department and not effectively coordinated;
- Policies on the release of data sets;
- Review of how best to protect worker safety and health, and the interaction of that function with ongoing epidemiology activities;
- Organizational location of the epidemiology program;

- The long-term role of the Committee on DOE Radiation Epidemiological Research Programs, the National Research Council, and the National Academy of Sciences;
- Liaison between the Department and the broader public health community, such as State public health agencies; and
- Potential statutory changes which would strengthen the program or solve problems.

The Panel would be pleased to provide the Secretary with any additional comments which would clarify the recommendations in this Interim Report.

11/22/89